

South Falklands Basin, Assessment Unit 60600201
Assessment Results Summary

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				F95	F50	F5	Mean
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	10	0.56	0	900	8,173	2,229	0	1,725	16,733	4,466	0	42	425	112	147	723	2,673	961
Gas Fields	60						0	1,339	11,784	3,244	0	33	300	81	255	1,075	3,992	1,435
Total		0.56	0	900	8,173	2,229	0	3,064	28,518	7,710	0	75	725	193				

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Monte Carlo Results

Forecast: Oil in Oil Fields

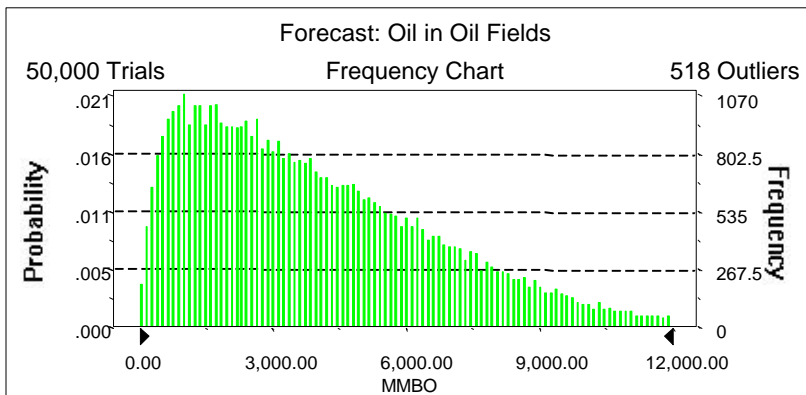
Summary:

Display range is from 0.00 to 12,000.00 MMBO

Entire range is from 13.30 to 22,483.41 MMBO

After 50,000 trials, the standard error of the mean is 12.54

Statistics:	Value
Trials	50000
Mean	3,994.03
Median	3,431.15
Mode	---
Standard Deviation	2,803.03
Variance	7,856,993.82
Skewness	0.92
Kurtosis	3.63
Coefficient of Variability	0.70
Range Minimum	13.30
Range Maximum	22,483.41
Range Width	22,470.10
Mean Standard Error	12.54



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	13.30
95%	535.71
90%	847.03
85%	1,143.41
80%	1,440.58
75%	1,743.84
70%	2,058.02
65%	2,386.85
60%	2,712.29
55%	3,062.81
50%	3,431.15
45%	3,824.77
40%	4,236.70
35%	4,689.87
30%	5,165.18
25%	5,705.04
20%	6,314.21
15%	7,038.55
10%	7,954.29
5%	9,331.95
0%	22,483.41

End of Forecast

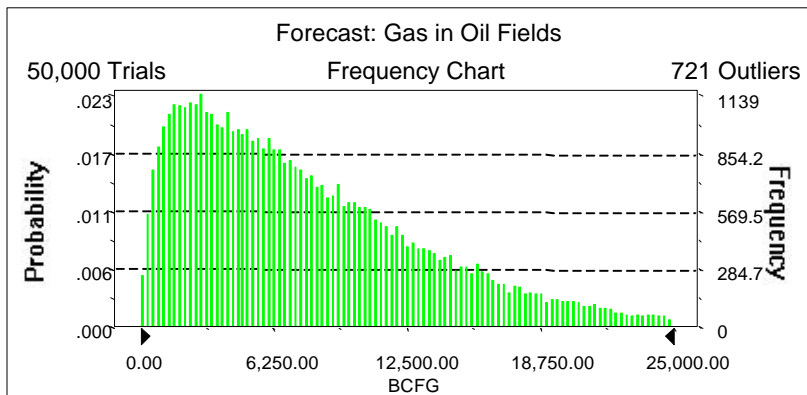
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Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 25,000.00 BCFG
Entire range is from 24.17 to 49,467.81 BCFG
After 50,000 trials, the standard error of the mean is 26.77

Statistics:	Value
Trials	50000
Mean	8,000.24
Median	6,631.59
Mode	---
Standard Deviation	5,986.86
Variance	35,842,479.06
Skewness	1.19
Kurtosis	4.68
Coefficient of Variability	0.75
Range Minimum	24.17
Range Maximum	49,467.81
Range Width	49,443.64
Mean Standard Error	26.77



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	24.17
95%	1,011.93
90%	1,619.49
85%	2,190.79
80%	2,767.48
75%	3,342.87
70%	3,963.42
65%	4,595.03
60%	5,238.06
55%	5,922.67
50%	6,631.59
45%	7,388.13
40%	8,223.39
35%	9,156.66
30%	10,147.37
25%	11,235.97
20%	12,547.79
15%	14,206.88
10%	16,260.69
5%	19,701.97
0%	49,467.81

End of Forecast

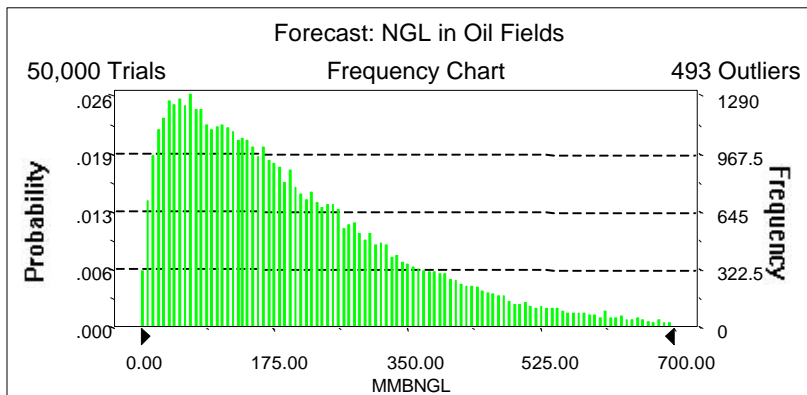
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Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 700.00 MMBNGL
Entire range is from 0.46 to 1,292.46 MMBNGL
After 50,000 trials, the standard error of the mean is 0.69

Statistics:	Value
Trials	50000
Mean	200.05
Median	163.22
Mode	---
Standard Deviation	154.77
Variance	23,954.30
Skewness	1.32
Kurtosis	5.24
Coefficient of Variability	0.77
Range Minimum	0.46
Range Maximum	1,292.46
Range Width	1,291.99
Mean Standard Error	0.69



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.46
95%	24.47
90%	39.40
85%	53.23
80%	67.01
75%	81.43
70%	96.96
65%	112.60
60%	128.63
55%	145.39
50%	163.22
45%	181.77
40%	202.30
35%	225.44
30%	250.76
25%	279.39
20%	312.89
15%	355.46
10%	412.57
5%	503.16
0%	1,292.46

End of Forecast

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Forecast: Largest Oil Field

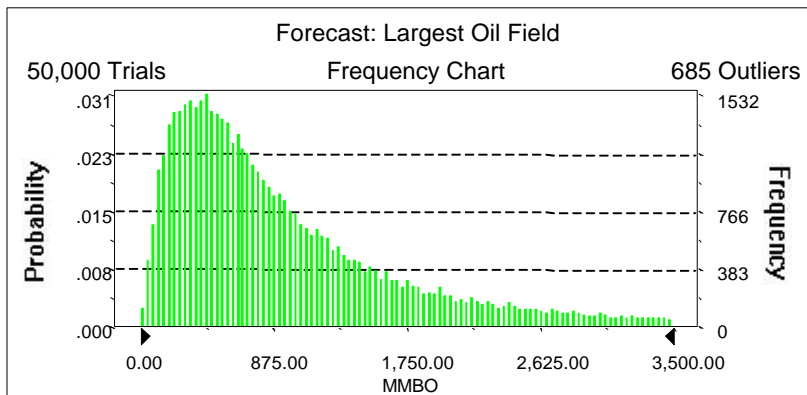
Summary:

Display range is from 0.00 to 3,500.00 MMBO

Entire range is from 13.26 to 3,996.82 MMBO

After 50,000 trials, the standard error of the mean is 3.51

Statistics:	Value
Trials	50000
Mean	960.91
Median	722.54
Mode	---
Standard Deviation	784.74
Variance	615,819.70
Skewness	1.47
Kurtosis	4.98
Coefficient of Variability	0.82
Range Minimum	13.26
Range Maximum	3,996.82
Range Width	3,983.55
Mean Standard Error	3.51



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	13.26
95%	146.59
90%	217.12
85%	277.69
80%	336.05
75%	396.20
70%	454.29
65%	515.63
60%	580.31
55%	649.06
50%	722.54
45%	805.68
40%	901.45
35%	1,005.43
30%	1,132.59
25%	1,279.40
20%	1,466.77
15%	1,717.41
10%	2,074.80
5%	2,672.75
0%	3,996.82

End of Forecast

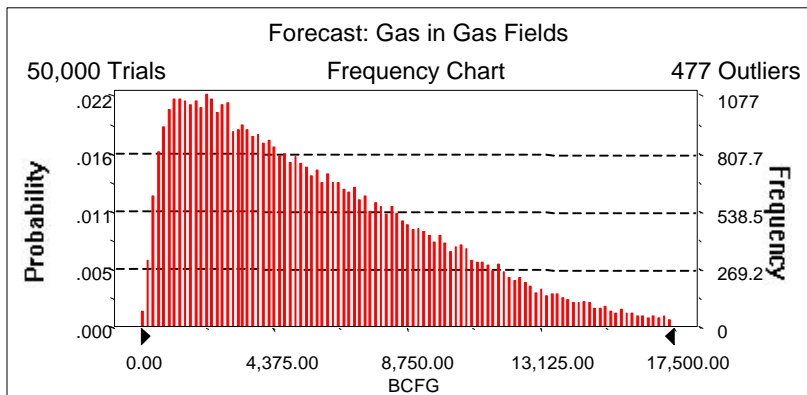
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Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 17,500.00 BCFG
Entire range is from 62.97 to 31,662.73 BCFG
After 50,000 trials, the standard error of the mean is 18.08

Statistics:	Value
Trials	50000
Mean	5,769.63
Median	4,933.11
Mode	---
Standard Deviation	4,042.79
Variance	16,344,142.79
Skewness	0.93
Kurtosis	3.67
Coefficient of Variability	0.70
Range Minimum	62.97
Range Maximum	31,662.73
Range Width	31,599.77
Mean Standard Error	18.08



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	62.97
95%	831.53
90%	1,254.60
85%	1,673.16
80%	2,098.00
75%	2,508.09
70%	2,937.37
65%	3,410.30
60%	3,890.58
55%	4,394.73
50%	4,933.11
45%	5,504.32
40%	6,123.39
35%	6,766.90
30%	7,473.08
25%	8,260.37
20%	9,133.05
15%	10,170.00
10%	11,467.64
5%	13,447.02
0%	31,662.73

End of Forecast

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Monte Carlo Results

Forecast: NGL in Gas Fields

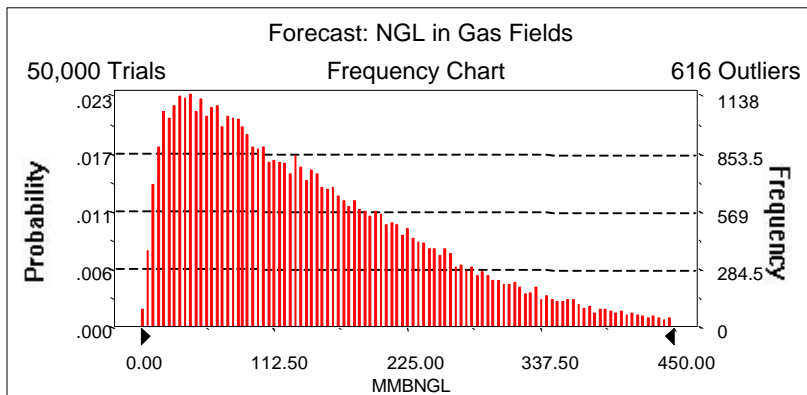
Summary:

Display range is from 0.00 to 450.00 MMBNGL

Entire range is from 1.18 to 898.83 MMBNGL

After 50,000 trials, the standard error of the mean is 0.47

Statistics:	Value
Trials	50000
Mean	144.28
Median	121.20
Mode	---
Standard Deviation	105.11
Variance	11,047.97
Skewness	1.09
Kurtosis	4.25
Coefficient of Variability	0.73
Range Minimum	1.18
Range Maximum	898.83
Range Width	897.65
Mean Standard Error	0.47



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.18
95%	20.03
90%	30.64
85%	40.59
80%	50.89
75%	61.25
70%	72.20
65%	83.13
60%	94.62
55%	107.39
50%	121.20
45%	135.28
40%	150.27
35%	166.44
30%	184.52
25%	204.53
20%	227.31
15%	254.62
10%	291.16
5%	347.83
0%	898.83

End of Forecast

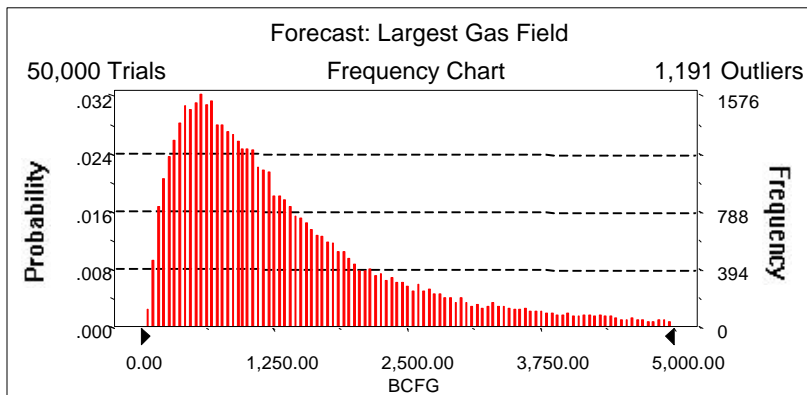
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Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 5,000.00 BCFG
Entire range is from 62.97 to 6,996.05 BCFG
After 50,000 trials, the standard error of the mean is 5.35

Statistics:	Value
Trials	50000
Mean	1,435.19
Median	1,075.19
Mode	---
Standard Deviation	1,196.57
Variance	1,431,786.25
Skewness	1.77
Kurtosis	6.50
Coefficient of Variability	0.83
Range Minimum	62.97
Range Maximum	6,996.05
Range Width	6,933.08
Mean Standard Error	5.35



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	62.97
95%	255.02
90%	355.89
85%	441.86
80%	526.77
75%	607.86
70%	689.22
65%	778.70
60%	871.25
55%	971.93
50%	1,075.19
45%	1,188.59
40%	1,316.67
35%	1,464.71
30%	1,638.81
25%	1,848.29
20%	2,124.89
15%	2,487.55
10%	3,022.94
5%	3,992.00
0%	6,996.05

End of Forecast

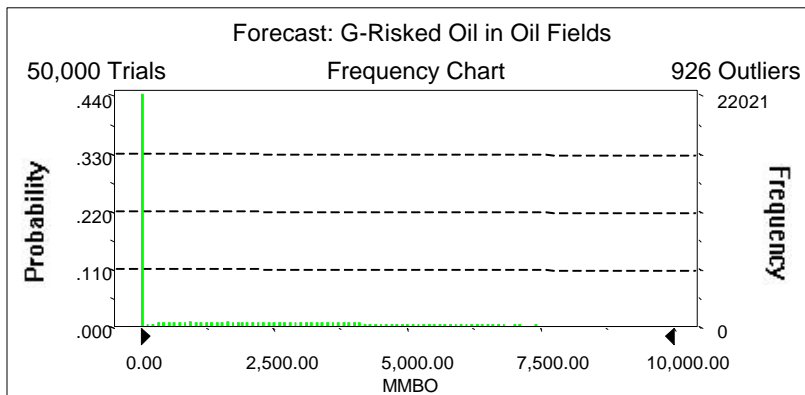
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Forecast: G-Risk Oil in Oil Fields

Summary:

Display range is from 0.00 to 10,000.00 MMBO
Entire range is from 0.00 to 21,451.58 MMBO
After 50,000 trials, the standard error of the mean is 12.83

Statistics:	Value
Trials	50000
Mean	2,229.42
Median	900.12
Mode	0.00
Standard Deviation	2,868.49
Variance	8,228,240.96
Skewness	1.35
Kurtosis	4.31
Coefficient of Variability	1.29
Range Minimum	0.00
Range Maximum	21,451.58
Range Width	21,451.58
Mean Standard Error	12.83



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Forecast: G-Risk Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	298.46
50%	900.12
45%	1,429.31
40%	1,978.74
35%	2,539.70
30%	3,158.03
25%	3,836.48
20%	4,605.16
15%	5,462.45
10%	6,573.73
5%	8,172.91
0%	21,451.58

End of Forecast

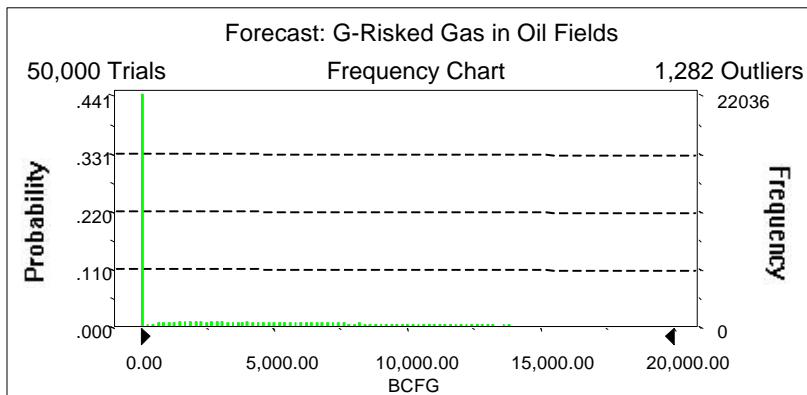
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Monte Carlo Results

Forecast: G-Risk Gas in Oil Fields

Summary:

Display range is from 0.00 to 20,000.00 BCFG
Entire range is from 0.00 to 49,467.81 BCFG
After 50,000 trials, the standard error of the mean is 26.59

Statistics:	Value
Trials	50000
Mean	4,465.50
Median	1,725.47
Mode	0.00
Standard Deviation	5,945.47
Variance	35,348,635.97
Skewness	1.57
Kurtosis	5.46
Coefficient of Variability	1.33
Range Minimum	0.00
Range Maximum	49,467.81
Range Width	49,467.81
Mean Standard Error	26.59



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Forecast: G-Risk Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	559.22
50%	1,725.47
45%	2,751.89
40%	3,788.73
35%	4,913.97
30%	6,113.00
25%	7,415.59
20%	9,003.30
15%	10,816.90
10%	13,163.70
5%	16,733.31
0%	49,467.81

End of Forecast

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Forecast: G-Riskd NGL in Oil Fields

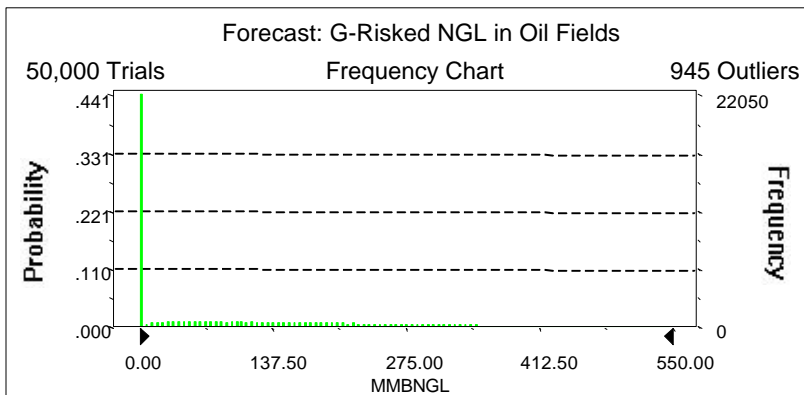
Summary:

Display range is from 0.00 to 550.00 MMBNGL

Entire range is from 0.00 to 1,292.46 MMBNGL

After 50,000 trials, the standard error of the mean is 0.68

Statistics:	Value
Trials	50000
Mean	111.70
Median	41.92
Mode	0.00
Standard Deviation	151.70
Variance	23,012.21
Skewness	1.69
Kurtosis	6.18
Coefficient of Variability	1.36
Range Minimum	0.00
Range Maximum	1,292.46
Range Width	1,292.46
Mean Standard Error	0.68



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Forecast: G-Riskied NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	13.36
50%	41.92
45%	66.24
40%	92.90
35%	120.28
30%	149.80
25%	182.73
20%	221.52
15%	267.22
10%	328.20
5%	425.17
0%	1,292.46

End of Forecast

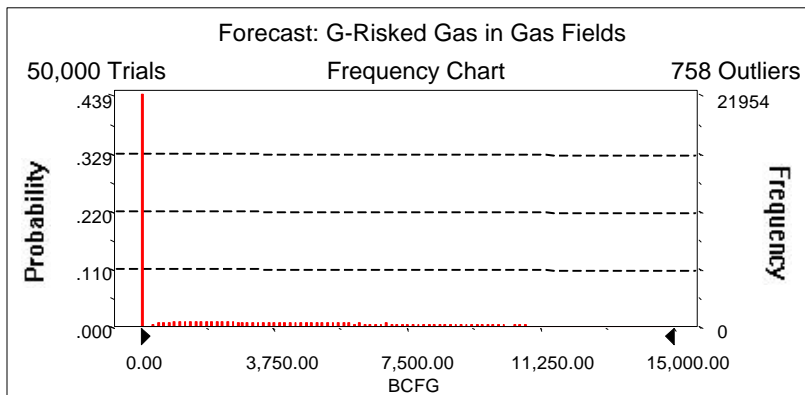
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Forecast: G-Risk Gas in Gas Fields

Summary:

Display range is from 0.00 to 15,000.00 BCFG
Entire range is from 0.00 to 31,662.73 BCFG
After 50,000 trials, the standard error of the mean is 18.61

Statistics:	Value
Trials	50000
Mean	3,244.42
Median	1,338.97
Mode	0.00
Standard Deviation	4,160.46
Variance	17,309,449.42
Skewness	1.35
Kurtosis	4.33
Coefficient of Variability	1.28
Range Minimum	0.00
Range Maximum	31,662.73
Range Width	31,662.73
Mean Standard Error	18.61



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Forecast: G-Risk Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	529.86
50%	1,338.97
45%	2,099.75
40%	2,861.22
35%	3,710.90
30%	4,584.52
25%	5,574.74
20%	6,717.29
15%	7,997.01
10%	9,558.55
5%	11,784.34
0%	31,662.73

End of Forecast

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Forecast: G-Riskd NGL in Gas Fields

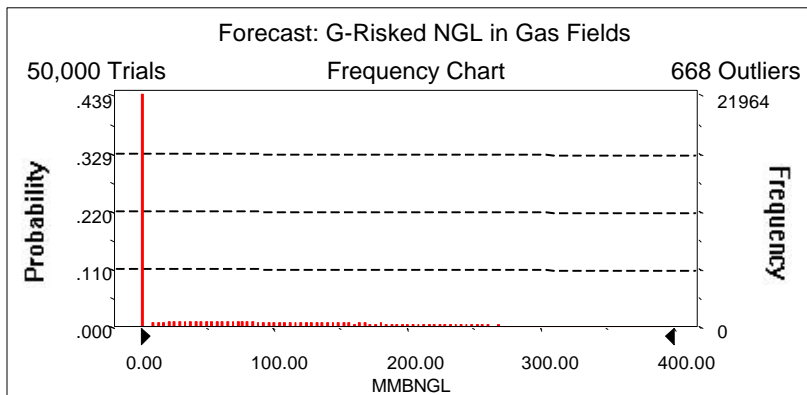
Summary:

Display range is from 0.00 to 400.00 MMBNGL

Entire range is from 0.00 to 814.23 MMBNGL

After 50,000 trials, the standard error of the mean is 0.47

Statistics:	Value
Trials	50000
Mean	81.05
Median	32.59
Mode	0.00
Standard Deviation	106.03
Variance	11,243.07
Skewness	1.47
Kurtosis	4.95
Coefficient of Variability	1.31
Range Minimum	0.00
Range Maximum	814.23
Range Width	814.23
Mean Standard Error	0.47



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Forecast: G-Riskied NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	12.47
50%	32.59
45%	51.07
40%	70.28
35%	90.09
30%	112.38
25%	136.96
20%	165.06
15%	197.97
10%	238.59
5%	300.30
0%	814.23

End of Forecast

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Assumptions

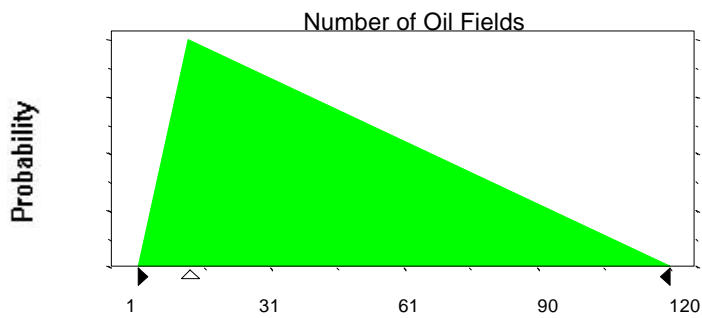
Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	12
Maximum	120

Selected range is from 1 to 120

Mean value in simulation was 44



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	86.87
Standard Deviation	367.16

Shifted parameters

96.87
367.16

Selected range is from 0.00 to 3,990.00

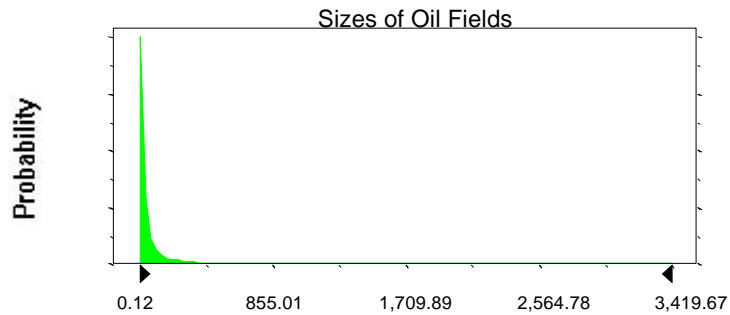
Mean value in simulation was 79.45

10.00 to 4,000.00

89.45

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Assumption: Sizes of Oil Fields (cont'd)



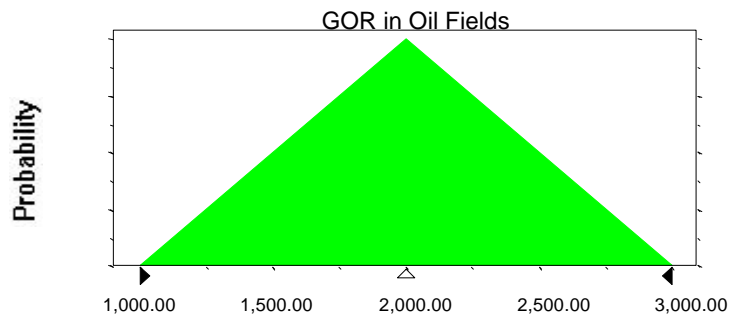
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	2,000.00
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00

Mean value in simulation was 2,000.54



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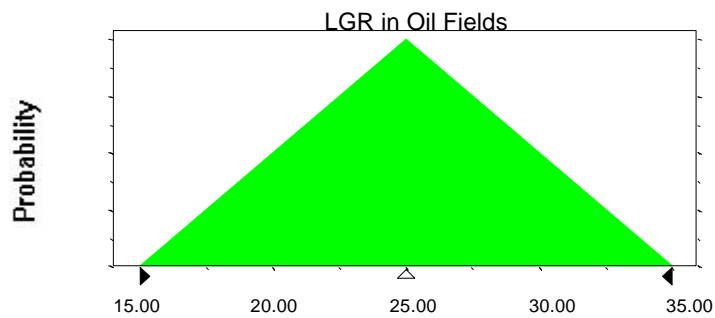
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	15.00
Likeliest	25.00
Maximum	35.00

Selected range is from 15.00 to 35.00

Mean value in simulation was 25.03



Assumption: Number of Gas Fields

Triangular distribution with parameters:

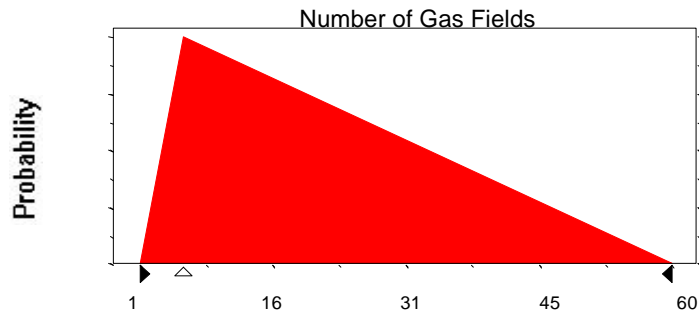
Minimum	1
Likeliest	6
Maximum	60

Selected range is from 1 to 60

Mean value in simulation was 22

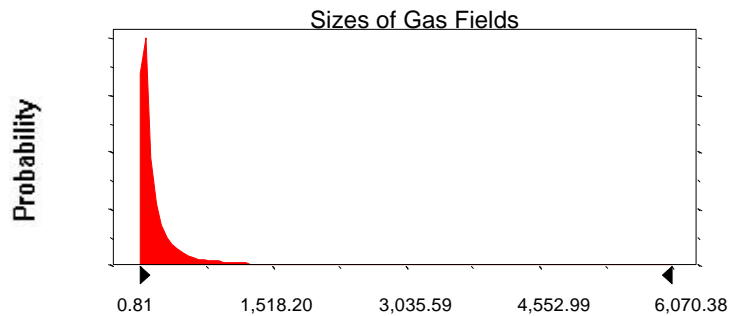
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters
Mean	211.65 271.65
Standard Deviation	603.90 603.9
Selected range is from 0.00 to 6,940.00	60.00 to 7,000.00
Mean value in simulation was 198.71	258.71



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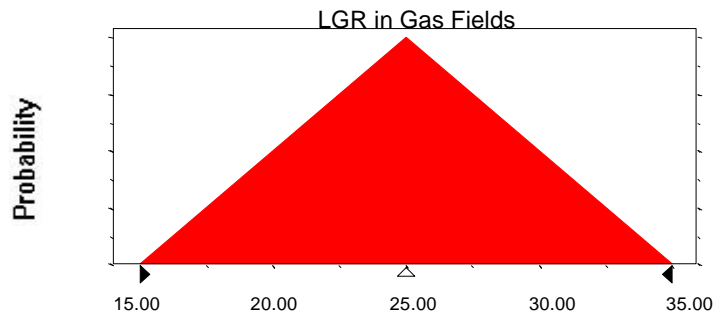
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	15.00
Likeliest	25.00
Maximum	35.00

Selected range is from 15.00 to 35.00

Mean value in simulation was 24.99



End of Assumptions

Simulation started on 10/15/99 at 13:56:48

Simulation stopped on 10/15/99 at 14:42:22